# Adding Elaboration to Lessons

**In-depth discussions and summaries.**

There is no replacement for this strategy. Students somehow need to talk about, argue, think through, summarize, question, rewrite and recall the learning to develop some depth of elaboration.

An older study (Eysenck and Eysenck1979) showed that processing capacity was greater when information was retrieved from secondary (the resource) memory than from primary memory ("I recall"). It's better when processing was of a deep, semantic nature than when it was shallow. Students have to do the digging, not you. Let them create quizzes, summaries or dialogs with the material.

More recently, teachers found that if you pause and give students time to answer questions on index cards, then discuss in groups learning goes up. These short, in-class writing exercises increase focus, thinking and depth of knowledge (Butler 2001). Reciprocal teaching is well supported by research. Developed by Annemarie Palincsar and Ann Brown in 1984, reciprocal teaching switches the roles of the student and teacher.

It has been well generalized (Coleman 1997) to many subjects areas as well by using three basic steps:

\* Group discussions. These smaller groups allow less competent students to perform at higher levels with greater safety than in the large group. These may include small g

\* Independent Group Discussions. The group collaborates to revise, understand and construct the meaning of the material their way. Students become motivated by autonomy and curiosity.

\* Scaffolding: Students can learn from peers just as well as they can from adults. But the process must be guided and managed to avoid any downsides. Here the teacher encourages and provokes students for deeper understanding. The teacher provides support for those less able students and then backs off.

#### ****The commonly used process includes these steps:****

**The old way was to ask student for their answers, acknowledge them and move on. But research tells us that asking students to answer why the answer is correct is better. For students to grow as thinkers, gatherers of knowledge and to improve self-esteem, make the typical Q&A process more productive. Ask students to explain why correct answers are right and why and how they came up with the incorrect ones. This consistently leads to deeper, more accurate learning (Bielaczyc et al.1995).**

This strategy works well with students on their own work, too. If you compare the results of high school student learning with either complete materials provided versus self-generated elaborations, students demonstrated greater learning when instructed to use self-generated and very elaborative interrogation (a questioning strategy using "why" questions. The other, less effective choice in this study was using repetition of teacher-provided elaborations of facts (Wood 1994). Take every opportunity you can to elaborate, even in front of the room. Remember that students are highly sensitive to your comments, so be on your best behavior when asking students to elaborate.

**The primary tools for elaboration include the following five strategies:**

* **Understanding key relationships** (water-clouds-rain, etc.)
* **Transformation of content** (turn a summary into a song, an object a mural, map it, etc.)
* **Discover new meaning from the same content** (study, discussion or reflection may bring it out)
* **Find a new organization of content** (see it larger context, see categories within it)
* **Uncover details within the main ideas from content searches** (many key ideas may have a half dozen sub topics, each of those may have another dozen details)

Without having some guidelines of where elaboration can take students cognitively, you won't know what to do.

These are a few of my favorite things! Enjoy them.

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